

Time 00:00 to 4:04 general talk ...

Interviewer 4:05

This is the case study, and I want you to tell me what kind of explanation you want. Okay, so it involves the AI application of automated vehicles, and it involves the occurrences of actual car crashes involving one particular AV brand, which is Tesla, okay, and its advanced driver assistance system called Autopilot, okay. Tesla has this software called autopilot that does, basically, steering, braking, acceleration functions of the vehicle itself, without any assistance from the human driver, like a person, presses a button and off it goes. Also know Autopilot can at any time disengage, like just stop and hand the controls back to the driver. So it'll stop steering, it'll stop braking, it'll stop accelerating. Okay, so between January 2018 and January 2022 according to USA NHTSA's Office of Defects Investigation, Tesla AVs with Autopilot engaged, were involved in 16 crashes where they struck highly visible stationary in-road and roadside first responder vehicles, so police, ambulance, fire trucks, road maintenance lights flashing. They were attending to pre-existing collision scenes. And these 16 Teslas all over America, different times, crashed into them. And on average, in these crashes, Auto pilot aborted the vehicle control less than one second prior to impact. So it just went . . . okay, let go, stopped steering, stopped braking, stopped accelerating, less than one second before on average, in these 16 crashes

Stakeholder5_NonAV Driver 5:56

Can I ask the question?

Interviewer:

Sure. Please.

Stakeholder5_NonAV Driver:

So ... the 16 crashes happened to first responded vehicles only

Interviewer 6:06

Yes, just 16, plus there's hundreds, yes, but out of that, 16 were designated for a specific investigation by US NHTSA

Stakeholder5_NonAV Driver 6:19

And, what was the driver doing at that time before the crash?

Interviewer 6:22

Not paying attention

Stakeholder5_NonAV Driver 6:24

Not paying attention. Okay? So it's doing something else.

Interviewer:

We don't know what,

Stakeholder5_NonAV Driver:
Okay, because they are able to still get the control, right?

Interviewer:
Yes, yes.

Stakeholder5_NonAV Driver:
If you're looking at the ahead, they can see what's going on.

Interviewer:
Right, right.

Interviewer 6:40
Okay, okay, okay, all right.

Stakeholder5_NonAV Driver:
OK, I'm clear.

Interviewer:
So based on this scenario, uh.... you're seeking explanatory information about these car crashes from Autopilot. Okay, so you want to know from Autopilot, what questions would you ask about the decisions it made or didn't make, about the actions it took or didn't take.

Stakeholder5_NonAV Driver 7:05
I'm asking to AI, basically question and I

Interviewer 7:09
Yeah ... and if it helps you, you can pretend Autopilot is a human being who did this. Okay, what kind of questions would you ask? Would you even want an explanation for these crashes?

Stakeholder5_NonAV Driver 7:20
First question for me, why you did not realize the vehicle? Because those are big, big vehicles, and they have visible lights, big size, the big shape than other cars, so it's quite visible. So I just want to learn why, what he was thinking about object. Like, did he think the object is not maybe. Again, I know that he's AI that's not human, but if

Interviewer 7:53
It's okay, it's performing human types. Yeah. So if it helps you to think of Autopilot as human, what kind of questions would you ask?

Stakeholder5_NonAV Driver:
I'll just say, Why do you didn't see,

Interviewer:
Okay ... And then what would you ask? Suppose it said, I did see.

Stakeholder5_NonAV Driver 8:07

If you did see, did you categorize those big vehicles as vehicle, an object, or did you consider that something else? Maybe even, did you consider the big vehicle on the road maybe it isn't there?

Interviewer 8:25

Okay, interesting, yes, yes,

Stakeholder5_NonAV Driver 8:27

because there's a big flashing going on, maybe it thinks a plane or something,

Interviewer:

right, right?

Stakeholder5_NonAV Driver:

Because you, maybe you see, I think AI definitely sees the object, because the object is quite big.

Interviewer 8:39

Well, assume, okay, assume all the hardware, all the sensors, assume the braking, steering, acceleration, assume the engines working fine. Everything physically is working fine. Assume that it can see, you know what I'm saying, but it still made the decision to keep driving and then release within less than one second.

Stakeholder5_NonAV Driver 9:03

Because my question to her, actually. Until that point she was able to drive the car, and the hardware was working right, so the cameras are working, so you are clearly able to see it, the people, so and the objects and . . . but what are you doing with that information? What you do with information, especially when it comes to different objects, like a big shape, flashy cars, you are just thinking, do you consider them as a vehicle on road? That's my first question. And if you think it's not a vehicle or on the on the, on the road, what you were thinking it was. And then, then, yes, I guess I think that my question to her is, what that what category you put this object? Is it vehicle or the is

Interviewer 10:03

okay. So you're you're thinking it sees something,

Stakeholder5_NonAV Driver 10:08

Sees something, but maybe doesn't recognize it.

Interviewer 10:12

So if it does see something, then think that through, because remember, it kept driving.

Stakeholder5_NonAV Driver:

That's right.

Interviewer 10:21

Carry on with your inquiry. It still kept trying to it ... sees an object, but you say it kept driving, right?

Stakeholder5_NonAV Driver 10:30

And always, I mean, if, if she kept driving, then it the question that she she didn't think about. She didn't think this as a vehicle on the road. So she thought something else, until the point that it's almost in fact, happened. So then he she about the vehicle control, So then,

Interviewer 10:49

Right. Well, here's a question,

Stakeholder5_NonAV Driver:

Why one second?

Interviewer:

If it thinks that okay, why one second and ... okay, so it sees the object, and it keeps driving to it. It knows there's an object, and it keeps driving. And you're saying, why one second?

Stakeholder5_NonAV Driver 11:11

Why one second? Yeah, I mean exactly if you because ... if you think categorically it is not a vehicle on the road, you will need to keep driving until you crash. We don't have the abort the vehicle about the control.

Interviewer 11:23

So you're saying it's okay to drive towards any object on the road?. Is that what you're saying?

Stakeholder5_NonAV Driver 11:31

No I'm saying, if the driver Autopilot categorically thinks that this is not a vehicle on road and something else.

Interviewer 11:42

Okay, so it's okay to drive towards something else,

Stakeholder5_NonAV Driver 11:45

But I'm maybe, maybe did the Autopilot didn't consider it as an object on the road.

Interviewer:

What would you think it can be?

Stakeholder5_NonAV Driver:

It can be maybe a balloon or something? There's a flashy thing. Maybe the flash, you know, maybe it impacts the hardware to see the vehicle, ... I don't know. Maybe the flashes, so I have to immediately get lots of different variables at this ... But in my thinking, if, okay, let's

actually brought up new topic, if the flashes are affecting the hardware. I didn't think of the hardware option right now for me, if the flash affects the hardware, if the flashes affect the hardware failure, until one second, it's still unable to see the vehicle, and then before one second, he aborts, or again, if the Autopilot thinks it is not an object on the road. Then my question, why did you change your mind after? You made a decision. It's not object on the road. I can drive through . . . But you didn't drive through. You just stopped,

Interviewer 12:59

Stopped a second before. So why did you stop driving a second before? Can you tell me a bit more about what kind of information you're looking for about the decision to stop driving?

Stakeholder5_NonAV Driver 13:10

I think clearly, like a human, you don't want to drive to the object, right? If you and Autopilots, they do not drive through objects generally. So they are trained not to hit the objects,

Interviewer 13:24

Right. So instead of hitting the object, it decided

Stakeholder5_NonAV Driver:

This.

Interviewer:

Right, so do humans do this? Do humans?

Stakeholder5_NonAV Driver 13:36

Yes. Sometimes, you know, you know. Sometimes, when you don't have any anything left in option left, you just

Interviewer 13:42

give up.

Stakeholder5_NonAV Driver 13:47

Give up. If, if... in that second, if he thinks that, or she thinks that there's no other options left,

Interviewer:

It just, lets go.

Stakeholder5_NonAV Driver:

Just, lets go. Even same, the crashes as well, like if you don't have an option, you just let go bit go, or sometimes you even start thinking, . . . you're so overwhelmed, okay, with the information you have. Sometimes humans does the same thing, . . . You have so much information and you so little time, you just overwhelmed and paralyzed,

Interviewer 14:18

Okay, yeah, didn't think of that. Thank you. Yes. Anything else you want to know from Autopilot about this scenario?

Stakeholder5_NonAV Driver 14:29

I think, yeah. I mean the question I will ask, Did you see the object? If you see the objects, did you consider this a vehicle on the road that does still,

Interviewer 14:43

Okay, alright ... um... anything about controlling the steering, braking or acceleration? Do you have questions about those functions that it would it performs it? You know, you have any questions about its ability to brake, steer, or...

Stakeholder5_NonAV Driver 14:58

Ability brake, steer? I don't have, . . . I mean, like there are so many Autopilots right now on roads right that they're not that only 16 of them probably right, correct?

Interviewer 15:12

Oh, there's 1000s, hundreds of 1000s

Stakeholder5_NonAV Driver 15:15

Hundreds of 1000s. Yes, we are just talking about 16.

Interviewer 15:18

Yeah because of this scenario, the common scenario happens to be crashing into first responder vehicles

Stakeholder5_NonAV Driver 15:26

But I'm seeing...we don't again, that's why I'm saying like we don't hear on the news every day, Teslas crashing,

Interviewer:

correct, correct.

Stakeholder5_NonAV Driver:

So I think I would not question their ability to drive.

Interviewer 15:38

Okay, okay, yeah,

Stakeholder5_NonAV Driver 15:41

okay, I have question more other people,

Interviewer 15:44

yeah, I hear you, yeah. Okay, so anything else about this is the main thrust of the information I'm gathering. The next few questions are just cursory. Okay, so anything else about this scenario that you want to share with me or comment on or...

Stakeholder5_NonAV Driver 16:02
Comment on. I mean, again, I said I

Interviewer 16:06
you have confidence.

Stakeholder5_NonAV Driver 16:09
I even like I don't have confidence about the fact, that they are able to drive. That's not up to me if I have confidence or not. It's factual. They are driving right now. And, and I don't hear news that they are crushing to someone every day, which is a good I get a fact that, they are able, they're driving. It's not my opinion. If I do, you think if I can be on the car without a with Autopilot and not even paying attention to road. I still don't have that comfort. Still, I like to be looking at the road.